

## HUNTERDON COUNTY ENVIRONMENTAL HEALTH ASSESSMENT AND IMPROVEMENT PLAN FOR 2002

### Statewide Strategic Goal #1

### Clean Air

**The air throughout the state will be healthful to breathe, and air pollutants will not damage our forests, land, or water bodies.**

#### **Key Issues**

New Jersey is especially concerned about two of these pollutants, ozone and fine particulate matter. Exposure to ozone can cause coughing, chest pain and throat irritation in healthy individuals and can trigger asthmatic reactions in sensitive individuals. Using epidemiological data that suggest that increased illness, and even deaths, are associated with exposure to ozone and the tiny particles that result primarily from combustion, in the summer of 1997 the USEPA set new standards for ozone and fine particulates.

#### **State Milestone**

By 2007, air throughout the state will meet national Clean Air Act standards for ozone and other air pollutants

**Action Areas** to reach milestone:

1. Reduce emission of ozone precursors from stationery sources such as industrial boilers,
2. Inspect heavy duty diesel trucks to reduce fine particulate concentrations, and
3. Identify and evaluate local emission sources, such as air toxics

#### **Hunterdon County Objectives /Indicators**

**Objective #1:** Air in the county shall continue to meet the National air quality standards for carbon dioxide, nitrogen dioxide, sulfur dioxide, ozone, particulate matter, and lead.

**Indicator:** EPA AIRS Data (1998 data show county in compliance)  
Reference: HRSA Community Health Status Report (7/00)

**Objective #2:** Toxic chemicals released annually will continue to decline.

**Indicator:** EPA TRI Explorer data for 1998 show total air emission releases totaled 23,943 pounds.

### **County Activities**

Inspect minor and B source air permitted facilities to determine compliance with the State's air pollution control regulations, with emphasis on inspecting at least 20% of the gas stations in the county.

Conduct inspections of potential facilities that may require air permits, as needed.

Conduct complaint investigations, as referred by citizens and the NJDEP.

Conduct inventories of other pollutant categories, at the direction of NJDEP.

Implement an idling enforcement inspection program in areas where idling is a problem.

Possibly participate in a new pilot project to enforce the visual emissions standard against diesel trucks at solid waste and/or weight check stations.

Patrol for open burning during routine field travel.

### **County Deliverables**

1. Submit all compliance monitoring inspection reports to NJDEP Minor Source Compliance Investigation program within 60 days of completing an inspection.
2. Submit all inspection reports by December 31, 2002, to count towards 2002 CEHA air program outputs.
3. Submit required documents, as necessary, for each phase of the air toxics inventory pilot project to NJDEP.

### **Resources**

Grants funds will be used to partially off-set salaries of two Public Health Investigators to assure adequate staffing to perform the above activities. In addition, two Registered Environmental Health Specialists (REHS) will maintain air certifications.

<b>Statewide Strategic Goal #2    Clean and Plentiful Water</b>
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<b>New Jersey rivers, lakes, and coastal waters will be feasible, swimmable, and support healthy ecosystems. Surface and ground water will be clean sources of water. Every person in New Jersey will have safe drinking water. Adequate quantities of surface and ground water will be available for all uses.</b>
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**Key Issues**

Over the past two decades, surface water quality has remained excellent in some areas and improved significantly in other areas. However, many watersheds have one or more water quality problems that must be addresses. Nutrient enrichment is causing eutrophic conditions in lakes and estuaries. Metals and organic pollutants are detected in the waters, sediments, and plant and animal life of some water bodies.

Although most ground water in New Jersey is of naturally high quality, some ground waters are affected by chemicals and bacteria that may be present at levels that would be detrimental to human health. Elevated levels of nitrates and naturally occurring radioactivity have been found in some areas. Microbial contamination, which occurs in some areas, is of concern when ground water is used for human consumption.

Private (homeowner) wells are sampled if water quality problems are suspected. Generally, these suspected problems are associated with a contaminated site or as a result of an ongoing investigation into a specific contaminant (e.g. mercury).

We need to evaluate the feasibility of generating new data to fill in gaps in the Department's knowledge regarding the quality of water in private wells.

The Department has undertaken some activities to educate private well owners about water quality testing.

Although there are sufficient quantities of water to meet statewide needs, some areas of the state are projected to experience shortages of water. These deficits may worsen as population and demand for water increase.

The Department, in partnership with the residents, community watershed conditions, natural resource conservation organization, farmers, local governments, businesses and industries from each watershed, will assess existing information to identify key issues and problems specific to their watershed management area. The significant causes of water quality problems, including point and non-point sources of pollution, will be evaluated and the opportunities for improvement identified. Then, based on this evaluation, a set of strategies tailored to that particular watershed management area will be implemented to achieve water resources goals and milestones, including water quality standards, in each watershed management area.

### **State Milestones**

- (2a.) 95% of public non-community (PNC) water systems will provide water that meets chemical and microbiological drinking water standards.
- (2b.) By 2005, 50 percent of assessed non-tidal river miles will support healthy, sustainable biological communities.

### **Action Area**

- 1. Development and implementation of innovative strategies to address pollution from non-point sources that are not regulated, including:
    - agriculture, residential, commercial land uses, golf courses, and governmental activities.
  - 2. Development of watershed assessments which impact on and coordinate with site remediation priorities at contaminated sites and historical landfills.
- (2.c) By 2005, 100 percent of New Jersey's coastal recreational beaches will be safe for bathing.
  - (2d.) Control pollution emitted to the waters of the State.

### **Hunterdon County Objectives/Indicators**

- Objective #1:** 95% of Hunterdon's 300 public non-community water systems will provide water that meets the applicable Safe Drinking Water Act quality standards.

**Indicator:** SNC reports

**Objective #2:** 95% of Hunterdon's 300 public non-community water systems will comply with the applicable water testing and reporting regulations.

**Indicator:** SNC reports

**Objective #3:** 100% of all newly drilled non-public wells will be constructed in accordance with state regulations.

**Indicator:** Health department field inspection records.

**Objective #4:** 100% of all water pollution complaints, whether drinking water or surface water related, will be promptly investigated

**Indicator:** Complaint log reports

### **County Activities**

Continue to inspect non-transient PNC systems at least every two years and transient PNC systems at least every four years.

Continue to implement the NJDEP Zero Tolerance Policy for PNC systems found in violation, to the best of our abilities with available staffing.

Periodically review the NJDEP public water database to determine if any PNC systems have failed to sample as required and undertake enforcement as required, to return violators to compliance. Provide correct, updated information on the statute of PNC's to NJDEP.

Continue GPS any PNC systems that are not yet located on GIS.

Participate in the migrant farm camp wells sampling program to collect ground water samples pre and mid-season for analysis. If exceedances of drinking water standards are discovered, appropriate compliance and enforcement actions will be taken to assure a safe drinking water supply. Report findings to the USEPA at conclusion of the season.

Continue to collect water samples at the NJDEP selected ambient surface water stations at a frequency of 5 samples over a 30-day period. These samples will be delivered to the DHSS lab or to the DHSS courier for transport to DHSS since DHSS will handle the analysis. (Somerset and Sussex should begin to participate in this program).

Consider participating in a pilot project to implement a septic system management program designed to locate and reduce nitrogen levels in areas found to have high nitrogen levels. Provide educational outreach to owners/operators of septic systems to properly maintain these systems (e.g. pump out every three years). (Supplemental funding available).

Investigate all water pollution complaints received from citizens and NJDEP. These investigations include, but are not limited to, potable water contamination, unpermitted discharges to surface or ground water, improperly constructed domestic wells, and septic system malfunctions. Use GIS system to map, when appropriate.

Provide follow-up response to MCL violations. Verify public notification. Verify remedial action(s) taken to return to compliance.

Physically witness and certify the installation of new domestic wells for compliance with state construction standards.

Identify abandoned wells and require proper sealing in accordance with N.J.A.C. 7:9-9.

Regulate new and altered septic system installations, review construction plans, and certify installations in accordance with State construction standards.

Review sewage system aspects of proposed subdivisions referred by planning boards and other municipal agencies to assure compliance with applicable statutes, rules and regulations.

Review proposed improvements for which a building permit is required to assure they do not negatively impact on existing sewage disposal areas, as required by all applicable statutes, rules and regulations.

Collect water samples as needed for analysis in accordance with the current version of the NJDEP Field Sampling Procedures Manual.

Initiate enforcement proceedings in a court of competent jurisdiction against violators as required by the NJDEP. Submit reports documenting violations to NJDEP for enforcement actions as required. Notify the NJDEP Regional Field Office of all pending enforcement actions. Conduct these enforcement actions in accordance with NJDEP's grace period policy.

Provide technical assistance to non-transient, non-community water systems for implementation of Lead and Copper Rule and Phase II/V Rule.

Compile and maintain files and records to support NDJEP and county enforcement actions.

Each season compile, from all municipalities within the county, the list of recreational bathing areas on lakes and streams, the bacteria data collected as per Chapter 9 of the State Sanitary Code, and the number of beach closing required due to water quality impairments.

NJDEP shall be notified on the outcome of a settlement conference or court action, including the penalty assessment and compliance plan (if applicable) shall be forwarded to NJDEP.

### **County Deliverables**

1. Conduct frequency and projected annual total of inspections as per program outputs.
2. Initiate enforcement proceedings and submit reports, as required by NJDEP.
3. Submit management plan, list of high nitrogen level areas and septic owners/operators to NJDEP if participating in the septic management pilot project.
4. Submit all completed reports, as required by NJDEP.

### **RESOURCES**

Partial salaries of 2 REHS and 3 Public Health Investigators will be offset with CEHA funds. In addition, laboratory costs for water testing are being supported with grant funds, as are references, GIS supplies and training.

**Statewide Goal #3 Safe and Healthy Communities**

**Every New Jersey community will be free from unacceptable human health and ecological risks due to direct exposure from hazardous substances and other potentially harmful agents. Natural resources will be managed to protect the public from floods, fires, and storms.**

**Key Issues:**

The industrial growth that occurred after World War II left us with numerous contaminated sites that have to be addressed to reduce the risks to current and future generations. While many sites have been cleaned up, many more are still in need of attention. This is especially true in urban areas, where contaminated sites can create a barrier to redevelopment (brownfields).

While there have been great advances in solid waste management, we need to maintain and increase recycling efforts.

To prevent the creation of new contaminated sites, continued efforts are needed to ensure the proper management and disposal of solid and hazardous wastes and hazardous substances that are generated by businesses and individuals. The number of individuals and companies utilizing source reduction and pollution prevention should be increased substantially.

The improper handling and use of pesticides can create risks to anyone in the vicinity of the applications of those chemicals.

**State Milestones**

- (3a.) By 2005, all NJ schools will have tested for radon gas.
- (3b.) By 2005, all NJ schools with radon concentrations above 4.0 pCi/l will be mitigated for radon.
- (3c.) By 2005, recycling rates of 65% of the total solid waste stream and 50% of the municipal waste stream will be achieved throughout the state.
- (3d.) Exposure to environmental risks such as those relating to pesticide use, hazardous materials emergencies (site remediation), and solid waste will be controlled and minimized.



- (3.e) Achieve and maintain safe management of wastes in an environmentally sound manner.

**Hunterdon County Objectives/Indicators**

**Objective #1:** By the end of 2002, 90% of public and private schools in Hunterdon County with radon concentrations above 4.0 pCi/l will be mitigated.

**Indicator:** In-county survey of schools reporting elevated radon levels.

**Objective #2:** 90% of pesticide applicators at retail food establishments, commercial landscapers, schools, and golf courses will be in essential compliance with applicable pesticide control regulations.

**Indicator:** Analysis of completed field inspection forms.

**Objective #3:** 90% of all hazardous material incidents requiring a county response will be responded to within 1 hour of notification.

**Indicator:** Analysis of completed incident response report records.

**Objective #4:** 95% of all homeowner underground storage tank removals referred by local construction officials will be inspected for evidence of leaks and, if found to be leaking, followed-up on accordingly.

**Indicator:** Analysis of inspection request/field inspection records.

**Objective #5:** Respond to all noise complaints within 7 days of receipt, and assure compliance with applicable state regulations within 6 months of complaint filing.

**Indicator:** Analysis of complaint log records.

### **County Activities**

Conduct routine inspections of commercial landscapers, pesticide applicators at golf courses, schools, and restaurants to determine compliance with the Pesticide Control Regulations.

Perform complaint investigations and collect samples at the direction of NJDEP.

Consider participation in pilot project to educate custodial staff at schools to concept of Integrated Pest Management.

In urban residential areas undertake a pilot project to investigate pesticide use and educate the public to help decrease the use of illegal or dangerous pesticides in homes.

Consider participation in program to review aquatic pesticide permits to determine compliance in the field.

Consider assisting NJDEP Pesticide program with collection of ground water samples from sentinel monitoring wells.

Respond to all hazardous material emergencies referred by NJDEP to assess environmental health threats and advise hazardous material response units accordingly. Make recommendations to and coordinate these response actions with appropriate federal, State and local agencies. Ensure that personnel assigned to respond to hazmat incidents are properly trained and participating in a medical surveillance program.

Investigate hazardous materials complaints received from citizens and NJDEP. Refer cases requiring remedial action to NJDEP.

Participate in a pilot project to conduct comprehensive inspections of regulated underground storage tanks (USTs) to determine status. Reinspect regulated USTs every three years.

Identify the precise locations of brownfield sites using GPS.

Use GIS technology to support mosquito control/West Nile virus program activities.

Continue to investigate all solid waste complaints received from citizens and NJDEP.

Conduct routine compliance monitoring inspections of Class A recycling facilities, convenience centers and farmland mulch sites, and continue to update the list of these sites and provide to the NJDEP. As requested, conduct inspections of contaminated soil sites.

Continue to monitor solid waste haulers to ensure compliance with the Solid Waste Management Act, and conduct interviews of transporters referred by NJDEP.

Continue compliance monitoring inspections of all other solid waste facilities.

Identify the precise locations of solid waste and recycling facilities, including all tire stockpiles of 5,000 plus tires using GIS. Require all identified tires sites with up to 5,000 tires on site to comply with the tire site exemptions at NJAC 7:26A-1.4(a)5.

Conduct greenstart compliance assistance inspections at a percentage of the DPW yards to proactively identify potential waste problems.

Investigate noise complaints received from citizens and the NJDEP that are under the jurisdiction of the Noise Control Regulations, and if applicable, enforce these regulations to achieve compliance.

### **County Deliverables**

1. Submit completed pesticide inspection reports/checklists to NJDEP pesticide program from review and approval
2. Submit proof of compliance with PEOSHA health and safety training requirements at annual CEHA program audit.
3. Follow NJDEP guidelines and protocols for UST inspections.
4. Submit completed inspection reports, as required.
5. Follow notification protocol and submit investigation reports, as required.
6. Enforce the Solid Waste Management Act and initiate enforcement proceedings pursuant to NJDEP guidelines.
7. Submit list of tire piles, with GIS location data.
8. Submit DPW yard survey information (re: Greenstart pgm.)
9. Conduct all required solid waste inspections, per required annual outputs.
10. Submit reports. as required by NJDEP.

## **Resources**

Salaries for 5 REHS and 3 public health investigators will be partially offset with grant funds. In addition, haz/mat supplies/equipment, GIS supplies, references, and training costs will all be offset using grant funds.

### **Statewide Strategic Goal #4 Healthy Ecosystems**

**The health, diversity, and integrity of New Jersey's ecosystems will be restored, protected, enhanced, and sustained.**

## **Key Issues:**

The states's ecosystems (forests, lakes, rivers, wetlands, agricultural lands, coastal estuaries, pinelands and grasslands) are vulnerable to disturbance, pollution, degradation and destruction as a result of human activities. Land use development patterns are a cause of stress on ecosystems. In addition, road building, trail blazing, industrial discharges, backyard gardening, house building, recreational boating and many other activities alter the natural environment. The impacts may be dramatic or subtle, abrupt or gradual. The cumulative impact from many small, unnoticed changes can significantly diminish the capacity of an ecosystem to renew itself.

## **State Milestone**

By 2005, there will be a net increase in wetland acreage and quality.

## **Hunterdon County Objectives/Indicators**

**Objective #1:** Wetland encroachment or disturbances reported to the county or observed by health department inspectors in the course of their routine work will be referred to the appropriate NJDEP office within 2 working days of notification or discovery

**Indicator:** Complaint log records.

## **County Activities**

Report instances where wetlands or wetland buffers are observed being encroached upon if observed in the course of routine work relating to land development such as subdivision review, septic system site reviews, field complaint investigation, etc.

**Deliverables:**

Written or verbal referrals to NJDEP, when appropriate.

**Resources**

No grant funds are being earmarked for this activity.

**Statewide Strategic Goal # 5**

**Abundant Open Space**

**Natural and scenic landscapes, habitats, and historic resources will be preserved. Every person will have the opportunity to visit an abundance of well-maintained parks, forests, wildlife areas and historic sites. The public will be given ample opportunity to learn about natural and historic resources and to have access to a wide variety of recreational experiences in both urban and non-urban settings.**

**Key Issues**

The preservation of open space protects land from future development, but far more importantly, preservation efforts provide the foundation for maintaining healthy ecosystems and sustainable communities in New Jersey.

**State Milestone**

By 2008, one million more acres of open space will be protected.

**Hunterdon County Objectives/Indicators**

Support to the degree possible public policies at the county and local levels which preserve open space, in recognition of the important role open space plays in helping to define the broader vision of "healthy people living in healthy communities."

**Statewide Strategic Goal # 6**

**Open and Effective  
Government**

**The NJDEP will fulfill its vision and mission and achieve its goals through the involvement of citizens and stakeholders as critical partners and through a commitment to quality principles and methods as a means to continuous improvement of its operations.**

**Hunterdon County Objectives/Indicators**

**Objective # 1:** Maintain the ongoing “Healthy Communities Initiative” entitled “**Hunterdon County Partnership for Health**” and broaden the scope of environmental issues being considered within the context of the project.

**Objective #2:** Convene one or more citizen focus groups during 2002 around environmental health priority concerns.

**Objective #3:** Partner with the Hunterdon Regional Cancer Center to offer radon canisters during lung cancer prevention month, to include radon awareness information in their newsletter, and to possibly co-sponsor a Radon Grand Rounds at Hunterdon Medical Center.

**Objective #4:** Sponsor a local Board of Health Member dinner in March, 2002, to strengthen relationships with the 26 local boards.

**RESOURCES:**

No grant funds are being earmarked for this activity.